## **CLAIMS:**

- 1. An electroluminescent device comprising a cathode, an anode, and therebetween a layer containing a host material and a second material comprising a bis(aryloxy)azine borohalide complex.
- 5 2. The device of claim 1, wherein said layer is a light-emitting layer.
  - 3. The device of claim 2, wherein the light emitting layer emits blue or blue-green light is emitted.
- 4. The device of claim 1, wherein the borohalide complex is present in an amount sufficient to improve the stability of the device.
  - 5. The device of claim 2, wherein the light-emitting layer includes a third material which emits light.
  - 6. The device of claim 1 wherein the second material comprises between 0.5 and 20% by weight of the layer.
- 7. The device of claim 1 wherein the second material comprises between 0.5 and 8% by weight of the layer.
  - 8. The complex of claim 1, wherein the second material comprises at least six rings.
- 9. The device of claim 1, wherein the complex comprises a bis(aryloxy)azine borofluoro complex.

- 10. The device of claim 1, wherein the complex comprises a pyridine group.
- 11. The device of claim 1, wherein the complex comprises a pyridine group and a fluoro substituent.
- 5 12. The device of claim 1, wherein the complex is represented by Formula (1),

wherein:

Ar<sup>1</sup> and Ar<sup>2</sup> independently represent the atoms necessary to form an aromatic ring group;

Ar<sup>3</sup> represents the atoms necessary to form a six-membered heteroaromatic ring group, provided that Ar<sup>3</sup> and Ar<sup>1</sup> as well as Ar<sup>3</sup> and Ar<sup>2</sup> may join together to form additional rings; and

X represents a halide.

- 13. The device of claim 12 wherein X represents fluoro.
- 14. The device of claim 12, wherein Ar<sup>1</sup> and Ar<sup>2</sup> independently represent the atoms necessary to form six-membered aromatic ring groups.
- 15. The device of claim 12, wherein Ar<sup>3</sup> represents the atoms necessary to form a pyridine ring group.
- 20 16. The device of claim 1, wherein the boron complex is represented by Formula (2),

15

$$v_3$$
 $v_4$ 
 $v_5$ 
 $v_7$ 
 $v_8$ 
 $v_9$ 
 $v_1$ 
 $v_{10}$ 
 $v_{11}$ 
 $v_{10}$ 
 $v_{2}$ 

wherein:

5

each of  $V_1 - V_{11}$  represents hydrogen or an independently selected substituent, provided that substituents may combine to form rings; and X represents a halide.

- 17. The device of claim 16 wherein X represents fluoro.
- 18. The device of claim 16 wherein at least two of  $V_1$ - $V_{11}$  represent aromatic rings or combine together to form at least two fused aromatic rings.
- 19. The device of claim 1 wherein the host material is represented by Formula (3),

$$W_2$$
 $W_3$ 
 $W_4$ 
 $W_{10}$ 
 $W_5$ 
 $W_6$ 
 $W_6$ 
 $W_6$ 
 $W_6$ 

wherein:

each of  $W_1$ - $W_{10}$  represent hydrogen or an independently selected substituent, provided that two substituents can combine to form rings.

20. The device of claim 19 wherein W<sup>9</sup> and W<sup>10</sup> independently represent naphthyl groups.

- 21. The device of claim 19 wherein W<sup>9</sup> represents a biphenyl group.
- 22. The device of claim 19 wherein W<sup>9</sup> and W<sup>10</sup> represent a naphthyl group and a biphenyl group, respectively.
- 5 23. The device of claim 5 wherein the third material comprises perylene or a derivative of perylene.
  - 24. The device of claim 5 wherein the third material comprises 2,5,8,11-tetra-*t*-butyl perylene.
- 25. The device of claim 5 wherein the third material comprises a material of Formula 4a or Formula 4b,

$$R_2$$
 $R_3$ 
 $R_4$ 
 $R_4$ 
 $R_4$ 
 $R_4$ 

$$R_{6}$$
 $R_{7}$ 
 $R_{8}$  (4b)

wherein:

each  $R_1 - R_8$  independently represents one or more of hydrogen or an independently selected substituent.

26. The device of claim 5 wherein the third material comprises a material represented by formula 5a,

wherein:

Ar<sup>4</sup> and Ar<sup>5</sup> independently represent the atoms necessary to form an aromatic ring group; and

X<sup>a</sup> and X<sup>b</sup> represent independently selected substituents.

27. The device of claim 5 wherein the third material comprises a compound represented by Formula 5b,

$$(z^{a})_{na}$$
 $(z^{a})_{na}$ 
 $(z^{b})_{nb}$ 
 $(z^{b})_{nb}$ 
 $(z^{b})_{nb}$ 
 $(z^{b})_{nb}$ 
 $(z^{b})_{nb}$ 

15

20

wherein:

each Z<sup>a</sup> and Z<sup>b</sup> independently an independently selected

substituent;

na independently represents 0, 1, or 2;

nb independently represents 0-4.

28. The device of claim 5 wherein the third material is present in an amount between 0.5 and 20% by weight of the light-emitting layer.

- 29. The device of claim 5 wherein the third material is present in an amount between 0.5 and 8% by weight of the light-emitting layer.
- 30. A display comprising the electroluminescent device of claim 1.
- 5 31. The device of claim 1 wherein white light is produced either directly or by using filters.
  - 32. An area lighting device comprising the electroluminescent device of claim 1.
- 33. A process for emitting light comprising applying a potential across the device of claim 1.